Work	Order ID January 20, 20	111717
Monday	January 20, 20	14 1.56.08

111717

Page 1

londay, January 20), 2014 1:56:08 PM									
tem ID: D34	451-5		Accept	*N900	040	100)*	Setup Star	* *N	S1*
7 Table 1	e Handle Arm							Stop	, * N	S2*
tart Date: 1/20 equired Date: 1/20 eference:	0/2014 Start Qty: 14.00 4/2014 Req'd Qty: 14.00	*14* *14*		Cust Item I Customer:	D:					
provals: Pr	rocess Plan:	Date: 14-1-20	Tooling:	Da	ate:	_	I	Run Star	* *N	R1*
	C:	Date:	SPC (Y/N):		ate:		;	Sto	, *N	R2*
quence ID/ ork Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D3451	Rev A									
	FLOW WATER JET		0.00				21	<u>0</u>		Ac
OW CNC Waterjet	Memo 1-Cut as pe Deburr if no		A Prog Rev: A	2-						14.01
0	QC2- Inspect parts off n	nachine FAI/FAIB	0.00							
1110* ality Control	Мето		0.00				_2i	O	· · .	Ae 14.01.
			DA\$	6 7.					2	
:120*	QC8- Inspect parts - sec	cond check	0.00				21	L		7.2
PFT シロへ QC	Мето		0.00	100			_			14-0

DQA:			Date:											7	
						WORK ORDER NON	-CC	ONFO	RMANCE / U	PDATE					AEROSPACE
QA Closed:			Date:								Wo	rk Order up	date only	\perp	
Work Orde	er:					DISPOSITION				AGAINST	DEP	ARTMENT	PROCESS		
	•				_	Rework			Skid-tube	Crosstube			Water Jet		Engineering
Part N	۱o.					Scrap		ı	Machining	Small Fab		Prod	d. Eng. Coor.		Quality
						Use-as-is			noforming	Finishing	-	Rec/Stor	e/Packaging	_	Other
NCR N	۱o.				_	Suspected Unapproved]		Large Fab	Composite	Ш		Supplier_	┙	
Root					Desc	ription of work order update		nitial	Ac	tion		Sign &	· · · · · · · · · · · · · · · · · · ·	T	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	\bot	QC Inspector
Design															
Doc/Data															
Equip/Tooling															
Handling/Pre															
Material															
Operator											ļ				
Offset/Setup															
Process															
Supplier														۱	
Training	\vdash										ļ				
Transport Unapproved	\vdash	ļ]							İ			ı	
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Landi	ng (Gear		-		General									· · · · · · · · · · · · · · · · · · ·
	Ŭ	Bending				Bend		Folio/P	rogram			Outside Dim	ensions [\neg _F	Pressure/Forced
;		Centre No	ot Concer	ntric		BOM/Route		Grain	•			Over/Under	tolerance		Set-up
		Cracks				Broken/Damage/Defect		Hardwa	re			Part Incorrec	ાં [٦	emperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/U	Inqualified		Part Lost/Mi	ssing	v	Veld
		Cuffs				Contamination		Instruct	tions Incomplete/	Unclear		Part Moved		\square v	Wrong Stock Pulled
		Crushing				Countersink		Misalig	gned/off center			Positioned V			
		Heat Trea	at			Cut Too Short		Mislabe	eled			Power Loss/	Surge	<u></u> c	Other
		Inspectio	n Strip in	Tube		Drawing		Misread	d						
		Marks/Ch				Drill Holes		Off-set							
· .		Turning S				Finish		4	Calibration				·· ····		
<u> </u>		Wave/Tw	ist in Tub	oe		Fit/Function		Out of	Sequence						

Work	Order	· ID	111717	

111717

Page 2

Monday, January 20, 2014 1:56:08 PM Accept Item ID: D3451-5 *N900040100* Setup Start **Revision ID:** Stop Item Name: Tube Handle Arm *14* **Start Qty: 14.00 Start Date:** 1/20/2014 **Cust Item ID: Required Date: 1/24/2014 Reg'd Oty:** 14.00 *14* **Customer:** Reference: Run Start Date: **Tooling:** Date: Approvals: Process Plan: Stop Date: SPC (Y/N): Date: OC: Reject Operation Sequence ID/ Set Up/ **Tool ID** Tool # Plan Accept Reject Insp. Work Center ID Number Stamp Description Code Qty Qty **Run Hours** 0.00 Identify as per dwg & Stock Location: WE 130 *120* 0.00 Packaging Memo Packaging 140 QC21- Final Inspection - Work Order Release 0.00 *140* 0.00 OC Memo Quality Control

DQA:			Date:												TRAGE
						WORK ORDER NON	-CC	ONFO	RMANCE / U					_	AEROSPACE
QA Closed:			Date:				,		<u></u>		Nork Orde	r up	date only		· · · · · · · · · · · · · · · · · · ·
Work Orde	ır.					DISPOSITION			4	AGAINST I	DEPARTM	ENT,	/PROCESS		
Work Orac	-				—	Rework	1		Skid-tube	Crosstube	\neg		Water Jet	\neg	Engineering
Part N	lo.					Scrap			Machining	Small Fab	1 .	Pro	d. Eng. Coor.		Quality
	-					Use-as-is			noforming	Finishing	Rec/		re/Packaging		Other
NCR 1	lo.					Suspected Unapproved	1		Large Fab	Composite			Supplier		
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Root					Desc	ription of work order update	ł	nitial		ion	Sign	1			
Cause	_	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	ription	Date	j	Verification	1	QC Inspector
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Doc/Data	_													Ì	
Equip/Tooling															
Handling/Pre														١	
Material															
Operator							ļ						ļ		
Offset/Setup	Щ						1								
Process															
Supplier															
Training						•								İ	
Transport							1								
Unapproved	İ												<u> </u>		-
							FA	ULT CA	TEGORY						
Landi						General	_	1		г	–		. г	_	
		Bending			<u> </u>	Bend	_	1	Program	ļ	Outside		}		Pressure/Forced
		Centre N	ot Concer	ntric		BOM/Route		Grain		1	—		tolerance		Set-up
		Cracks				Broken/Damage/Defect	\vdash	Hardwa			Part Inc		ŀ		Temperature/Cure
	_	Crimp/Kii	nk/Ripple	/Wave	ļ	Burrs	<u> </u>	1	ion Incomplete/U	1	Part Los		h		Weld
		Cuffs				Contamination		4	tions Incomplete/	Unclear	Part Mo				Wrong Stock Pulled
	<u> </u>	Crushing			<u> </u>	Countersink	<u></u>	-	gned/off center		Position				l
		Heat Trea			<u> </u>	Cut Too Short		Mislab		l	Power I	.oss/	Surge		Other
		Inspectio	-	Tube		Drawing	<u></u>	Misrea							
	$ldsymbol{f eta}$	Marks/Ch			\vdash	Drill Holes	<u> </u>	Off-set							
ļ 	<u> </u>	Turning S			<u> </u>	Finish	\vdash	4	Calibration						
√ ,		Wave/Tw	ist in Tub	oe e		Fit/Function		Out of	Sequence						

Page 1

Monday, January 20, 2014 2:12:24 PM

Work Order ID:

111717

Parent Item:

D3451-5

Parent Item Name:

Tube Handle Arm

Start Date: 1/20/2014

Required Date: 1/24/2014

Start Qty: 14.00

Required Qty: 14.00

Comments:

IPP Rev: A 08-06-18 new issue DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.125		Purchased	No				sf	201.7900	·	0.777	A	•	
6061-T6 .125 Sheet									4		He	14.	01. g
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT021		201.79							
				m12	7272	39.5			•				
				m12	7454	130.29			12	7454	\rightarrow		

m127501

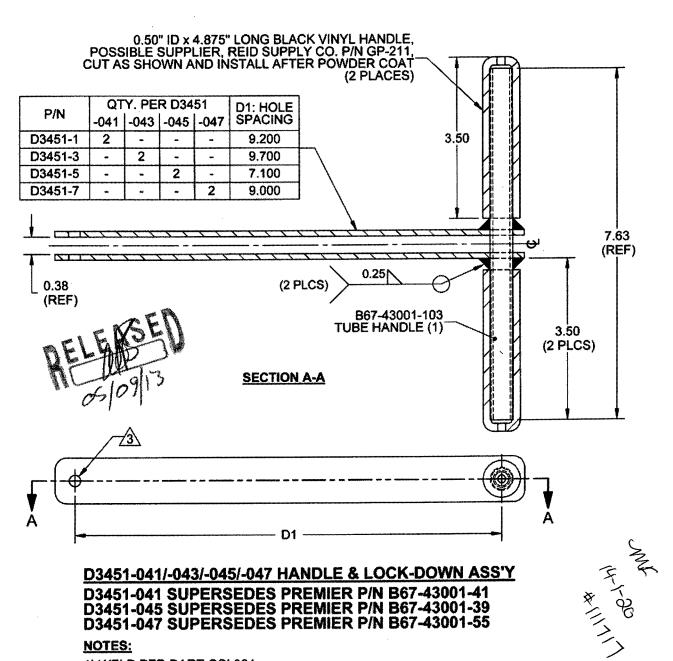
32

DQA:			Date:										0	TRAC
						WORK ORDER NON	-CC	ONFO	RMANCE / U			_	_	AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS		
	-		,		_	Rework	1		Skid-tube	Crosstube]	Water Jet	\neg	ngineering
Part N	lo.					Scrap	1	1	Machining	Small Fab	Pro	d. Eng. Coor.	7	Quality
	•					Use-as-is	1 1		noforming	Finishing	4	e/Packaging	1	Other
NCR I	۱o.					Suspected Unapproved]		Large Fab	Composite		Supplier		
Root					Desc	ription of work order update		nitial	Act	tion	Sign &			· · · · · · · · · · · · · · · · · · ·
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	1	QC Inspector
Design														
Doc/Data														
Equip/Tooling										•				
Handling/Pre														
Material									`					
Operator														
Offset/Setup														
Process	Ш						İ							
Supplier														
Training	Н													
Transport	\vdash													
Unapproved	<u> </u>		<u> </u>	L	i		EA	III T CAT	I TEGORY				ŀ	
Landi	na (General	FA	OLI CA	IEGORI					
Lanui		Bending				Bend		leolio/E	rogram	Γ''	Outside Dim	ensions [Pro	essure/Forced
Ì		Centre No	ot Concer	ntric	-	BOM/Route	-	Grain	ТОВТИПТ		Over/Under	- I-	_	t-up
	\vdash	Cracks	or conten	110	-	Broken/Damage/Defect		Hardwa	ire	<u> </u>	Part Incorred			mperature/Cure
	—	Crimp/Kir	nk/Ripple	/Wave		Burrs	\vdash	-	ion Incomplete/U	ngualified	Part Lost/Mi			eld
		Cuffs		,		Contamination		4 '	tions Incomplete/		Part Moved	ľ	\neg w	rong Stock Pulled
	Г	Crushing				Countersink		Misalig	ned/off center		Positioned V	ل Vrong		
		Heat Trea				Cut Too Short		Mislabe			Power Loss/	Surge	Ot	her
		Inspectio	n Strip in	Tube		Drawing		Misrea	d					
		Marks/Ch	natter			Drill Holes		Off-set						
		Turning S	equence			Finish		Out of	Calibration					
,, ~~		Wave/Tw	ist in Tul	ре		Fit/Function		Out of	Sequence					





THE COURT OF STREET



D3451-041/-043/-045/-047 HANDLE & LOCK-DOWN ASS'Y

D3451-041 SUPERSEDES PREMIER P/N B67-43001-41 D3451-045 SUPERSEDES PREMIER P/N B67-43001-39 D3451-047 SUPERSEDES PREMIER P/N B67-43001-55

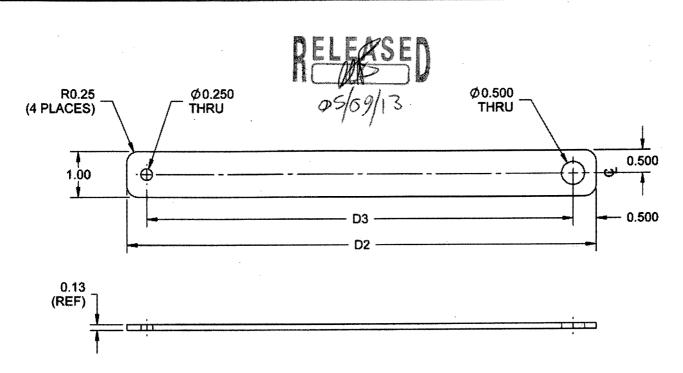
NOTES:

- 1) WELD PER DART QSI 004
- CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 MASK BEFORE PAINTING.
- FINISH: POWDER COAT PAINT GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
- PART IS SYMETRICAL ABOUT CENTER LINE.
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- **ALL DIMENSIONS ARE IN INCHES**
- 8) BREAK ALL SHARP EDGES 0.005 TO 0.010

DQA:			Date:										
						WORK ORDER NON-	-CC	NFO	RMANCE / UPDATE				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	er:					DISPOSITION			AGAINS	T DE	PARTMENT	PROCESS	
i	•					Rework	ı		Skid-tube Crosstub	e	1	Water Jet	Engineering
Part N	lo.					Scrap			Machining Small Fa	-	Pro	d. Eng. Coor.	Quality
	•				-	Use-as-is		Therr	noforming Finishir	ıg	Rec/Sto	e/Packaging	Other
NCR N	lo.			-		Suspected Unapproved			Large Fab Composit	te		Supplier	
Root					Desci	iption of work order update	ı	nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data						•							
Equip/Tooling	\dashv												
Handling/Pre	\dashv												
Material	\dashv						1					·	
Operator	\dashv											:	
Offset/Setup							l						
Process Supplier													
Training													
Transport													
Unapproved													
		<u> </u>	•	1	·		FA	ULT CA	TEGORY		•		
Landi	ng (Gear				General					_		
		Bending				Bend		Folio/I	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardw	are		Part Incorre	cí	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave	L	Burrs		Inspect	tion Incomplete/Unqualified	<u> </u>	Part Lost/Mi	ssing	Weld
'		Cuffs				Contamination	<u> </u>	4	tions Incomplete/Unclear	L	Part Moved		Wrong Stock Pulled
	L	Crushing				Countersink	_	4	gned/off center		Positioned V		7
	<u> </u>	Heat Trea				Cut Too Short	L	Mislab			Power Loss/	Surge	Other
		Inspection		Tube		Drawing	_	Misrea				4.00	
		Marks/Ch			.	Drill Holes	_	Off-set					
	_	Turning S	-		<u> </u>	Finish	\vdash	4	Calibration				
		Wave/Tw	ist in Tub	oe .		Fit/Function		Out of	Sequence				· "



- 1			ilikin wan tan 19
DESIGN	DRAWN BY	DART AERO HAWKESBURY, O	-
CHECKED	APPROYED	DRAWING NO.	REV. A SHEET 2 OF 2
DATE 05	.08.25	TITLE HANDLE & LOCK-	SCALE DOWN ASS'Y 1:2



P/N	D2: CUT LENGHT	D3: HOLE SPACING
D3451-1	10.25	9.200
D3451-3	10.63	9.700
D3451-5	8.00	7.100
D3451-7	10.00	9.000

D3451-1/-3/-5/-7 TUBE HANDLE ARMS

D3451-1 SUPERSEDES PREMIER P/N B67-43001-303 D3451-5 SUPERSEDES PREMIER P/N B67-43001-301 D3451-7 SUPERSEDES PREMIER P/N B67-43001-101

NOTES:

1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.125)
2) PART IS SYMETRICAL ABOUT CENTER LINE.
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.010



DQA:			Date:										TO ATOM
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	
Work Orde	or.					DISPOSITION			AGAINST	DE	PARTMENT	PROCESS	
Work Orac	-'' -				_	Rework			Skid-tube Crosstube			Water Jet	Engineering
Part N	lo.					Scrap			Machining Small Fab		Pro	d. Eng. Coor.	Quality
	•					Use-as-is	li		noforming Finishing		Rec/Stor	e/Packaging	Other
NCR I	۱٥.					Suspected Unapproved			Large Fab Composite			Supplier	
Root					Desci	ription of work order update	ı	nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design			·										
Doc/Data	\Box												
Equip/Tooling													
Handling/Pre													
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Offset/Setup	Н			x .									
Process	\vdash	•											
Supplier Training							Ì						
Transport	Н												
Unapproved									1				
		····					FAI	ULT CA	TEGORY		•		
Landi	ng (Sear				General							
		Bending				Bend		Folio/I	Program		Outside Dim	ensions	Pressure/Forced
<u> </u>		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are	L	Part Incorre		Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	<u></u>	4	ion Incomplete/Unqualified	<u></u>	Part Lost/Mi	ssing	Weld
	-	Cuffs			<u> </u>	Contamination		4	tions Incomplete/Unclear	<u> </u>	Part Moved	L	Wrong Stock Pulled
	$oxed{oxed}$	Crushing				Countersink		4	gned/off center	-	Positioned V	_	٦٠٠٠
	<u> </u>	Heat Trea			 	Cut Too Short	\vdash	Mislab			Power Loss/	Surge	Other
	\vdash	Inspectio	•	Tube	<u> </u>	Drawing	-	Misrea					
	<u> </u>	Marks/Cl				Drill Holes	\vdash	Off-set					
	\vdash	Turning S			\vdash	Finish	\vdash	4	Calibration				
	1	Wave/Tw	vist in Tuk	oe		Fit/Function	L	JOut of	Sequence		<u> </u>		

DART AEROSPACE LTD	Work Order: 31/1717
Description: TUBE HANDLE ARM	Part Number: D3451-5
Inspection Dwg:03451 Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.500	+1- ,010	.500				JKM-05
, 500	+1- 1010	,500			V	
1.00	+1- ,030	1.00				
7.100	,010	7.100			<u>T</u>	VKm-06
8.00	1030	8.00			T	
.125	010	.191			V	
\$.250	+.005/-,001	.254				<u> </u>
\$,500	+.006/-001	.502			V	
		<u>.</u>				
		•			<u>. </u>	

	DAS	
Measured by:	Audited by: 27	Preliminary Approval:
Date: 14.01.22	Date: 14-01-27-	Date:

			.	
Re	v Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

\$ 10.04.15